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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

LEE, Y YOUNG

ART UNIT PAPER NUMBER

2613

DATE MAILED: 06/22/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/755,068

Applicant(s)

WU ET AL.

Examiner

Y. Lee

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 8-13, 15, 16, 18 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 14, 17, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3,6,7.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 1-7, 14, 17, 20, and 21 in Paper No. 9 is acknowledged. The traversal is on the ground(s) that all of the groups should belong in a single class 348, subclass 699. This is not found persuasive because although Group I may belong in class 348, subclass 699, the majority of other claims belong in class 375, as the application is currently classified by the USPTO.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 8-13, 15, 16, 18, and 19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 9.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Priority

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

5. The abstract of the disclosure is objected to because last line, "Figs. 1 to 4" should be deleted. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 7 recites the limitation "said noise reduced discrete global motion signals" in lines 6-7. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-7, 14, 17, 20, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Ratakonda (5,995,095).

Ratakonda, in Figures 1-5, 7, 9, and 10, discloses the same method of extracting key frames 44 from a video sequence 32, wherein the video sequence 32 comprises compressed video data MPEG having motion vectors as specified in claims 1-7, 14, 17, 20, and 21 of the present invention; the method comprising the steps of generating

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global motion signals 72 based on the motion vectors; generating dominant global direction clusters 74 based on the generated global motion signals 72; selecting key frames 76 using the generated dominant global direction clusters 74; and decompressing the selected key frames 142 to obtain the extracted key frames 44.

With respect to claims 2-7, 20, and 21, Ratakonda also discloses selecting potential key frames using a first set of predefined rules 84; removing redundant key frames from the selected potential key frames using a second set of predefined heuristic rules 86 resulting in the selected potential key frames; removing similar and/or repeated key frames from the set of selected key frames using a color histogram technique 134 resulting in the selected key frames; wherein generating global motion signals comprise generating a pan global motion signal, a zoom global motion signal, and a tilt global motion signal 46; one or more of a pan left, pan right, tilt up, tilt down, zoom in, zoom out and global still motion cluster 46; generating discrete global signals DCT from the generated global motion signals; removing noise 86 from the generated discrete global motion signals; generating dominant global direction clusters 48 based on the noise reduced discrete global motion signals; wherein the motion vectors are block motion vectors (Fig. 9), and the first generating step comprises the steps of decompressing the compressed video data 142 to obtain the block motion vectors; converting the block motion vectors to forward block motion vectors (I, P, B, motion compensation); generating global motion signals μ based on the forward block motion vectors; and wherein the compressed video data is MPEG compressed video data 144.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y. Lee whose telephone number is (703) 308-7584. The examiner can normally be reached on (703) 308-7584.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Y. Lee
Primary Examiner
Art Unit 2613

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